Common Market for Eastern and Southern Africa

☞ EDICT OF GOVERNMENT ☜

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COMESA 265-4 (2006) (English): Textiles — Burning behaviour of bedding items —Part 4:Specific test methods for the ignitability by a small open flame

ISO INSIDE

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COMESA HARMONISED STANDARD

COMESA/FDHS 265-4: 2006

Textiles — Burning behaviour of bedding items —Part 4:Specific test methods for the ignitability by a small open flame

REFERENCE: FDHS 265-4:2006

Foreword

The Common Market for Eastern and Southern Africa (COMESA) was established in 1994 as a regional economic grouping consisting of 20 member states after signing the co-operation Treaty. In Chapter 15 of the COMESA Treaty, Member States agreed to co-operate on matters of standardisation and Quality assurance with the aim of facilitating the faster movement of goods and services within the region so as to enhance expansion of intra-COMESA trade and industrial expansion.

Co-operation in standardisation is expected to result into having uniformly harmonised standards. Harmonisation of standards within the region is expected to reduce Technical Barriers to Trade that are normally encountered when goods and services are exchanged between COMESA Member States due to differences in technical requirements. Harmonized COMESA Standards are also expected to result into benefits such as greater industrial productivity and competitiveness, increased agricultural production and food security, a more rational exploitation of natural resources among others.

COMESA Harmonized Standards are developed by the COMESA experts on standards representing the National Standards Bodies and other stakeholders within the region and are approved after circulating Final Draft Harmonized Standards (FDHS) to all member states for at least three months. The assumption is that all contentious issues would have been resolved during the previous stages or that an international or regional standard being adopted has been subjected through a development process consistent with accepted international practice.

COMESA Standards are subject to review, to keep pace with technological advances. Users of the COMESA Harmonized Standards are therefore expected to ensure that they always have the latest version of the standards they are implementing.

This COMESA standard is technically identical to ISO 12952-4:1998- Textiles — Burning behaviour of bedding items —Part 4:Specific test methods for the ignitability by a small open flame

A COMESA Harmonized Standard does not purport to include all necessary provisions of a contract. Users are responsible for its correct application.

INTERNATIONAL STANDARD

ISO 12952-4

First edition
1998-12-15

Textiles — Burning behaviour of bedding items —

Part 4:
Specific test methods for the ignitability by a small open flame

Textiles — Comportement au feu des articles de literie —

Partie 4: Méthodes d'essai spécifiques pour l'allumabilité par une petite flamme nue

Reference number
ISO 12952-4:1998(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 12952 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 12952-4 was prepared by the European Committee for Standardization (CEN) in collaboration with ISO Technical Committee TC 38, *Textiles*, Subcommittee SC 19, *Burning behaviour of textiles and textile products*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Throughout the text of this standard, read “...this European Standard...” to mean “...this International Standard...”.

ISO 12952 consists of the following parts, under the general title *Textiles — Burning behaviour of bedding items*:

— *Part 1: General test methods for the ignitability by a smouldering cigarette*

— *Part 2: Specific test methods for the ignitability by a smouldering cigarette*

— *Part 3: General test methods for the ignitability by a small open flame*

— *Part 4: Specific test methods for the ignitability by a small open flame*

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Foreword

The text of EN ISO 12952-4:1999 has been prepared by Technical Committee CEN/TC 248 "Textiles and textile products", the secretariat of which is held by BSI, in collaboration with Technical Committee ISO/TC 38 "Textiles".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 1999, and conflicting national standards shall be withdrawn at the latest by July 1999.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

Fires are sometimes caused by the ignition of bedding items by smokers materials; the ignitability of bedding items by a smouldering cigarette or a small open flame is therefore an important feature in the assessment of the risk of fire.

It cannot be assumed that protection against a smouldering ignition source will automatically give protection against flaming ignition. Users of this standard should, thus, consider the need to submit test specimens to both cigarette and flaming ignition tests.

EN ISO 12052-1 and EN ISO 12952-2 describe a test method with the smouldering cigarette as ignition source. Testing against the ignition source of a small open flame forms the contents of EN ISO 12952-3 and EN ISO 12952-4.

This European Standard may be used for the assessment of ignitability of individual items of bedding and of composite arrangements.

EN ISO 12952-1 and EN ISO 12952-3 describe general testing procedure and aspects of testing common to all bedding items; EN ISO 12952-2 and EN ISO 12952-4 contain all details necessary for the testing of the specific bedding items.

As EN ISO 12952-3 and EN ISO 12952-4 complement each other, EN ISO 12952-2 cannot be used without also considering the general aspects of the test method given in EN ISO 12952-3.

> WARNING: This test relates only to the ignitability of materials under the particular conditions of test. It is not intended as a means of assessing the full potential fire hazard of the bedding item in use.
> Particular attention is drawn to the possibility of ignition of lower parts of a bedding assembly when using bedding items which are not themselves ignited.

1 Scope

This European Standard specifies product-specific details concerning specimen size, wash procedures, set-up of specimens and positions of the ignition source for testing bedding items according to the method described in EN ISO 12952-3.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN ISO 12952-3	Textiles - Burning behaviour of bedding items - Part 3: General test methods for the ignitability by a small open flame (ISO 12952-3:1999)
EN ISO 3175	Textiles - Evaluation of stability test methods to machine dry-cleaning (ISO 3175:1995)
ISO 26330	Textiles - Domestic washing and drying procedures for textile testing (ISO 6330:1984)
ISO/IEC GUIDE 52	Glossary of fire terms and definitions

3 Testing of individual bedding items

3.1 Test specimen

Flat materials shall be cut to (450 x 450) mm.

For pillows the test specimen shall be a full-sized item.

Bolsters shall be cut to a maximum length of 450 mm.

Quilts and duvets shall be cut to (450 x 450) mm (edges should be sealed if necessary). The test specimens shall include two original edges.

3.2 Cleaning procedures

Bedding items that are regularly cleaned in use shall be tested after five cleaning cycles, unless a higher number is specified.

Cleaning should be carried out in agreement with the method specified by the producer. If no method has been specified, the product shall be washed in accordance with method 2A of ISO 26330 and specimens shall not be dried between wash cycles.

If dry-cleaning is specified, use EN ISO 3175.

3.3 Set-up of test specimens and positions of ignition source

3.3.1 Positioning of the ignition source

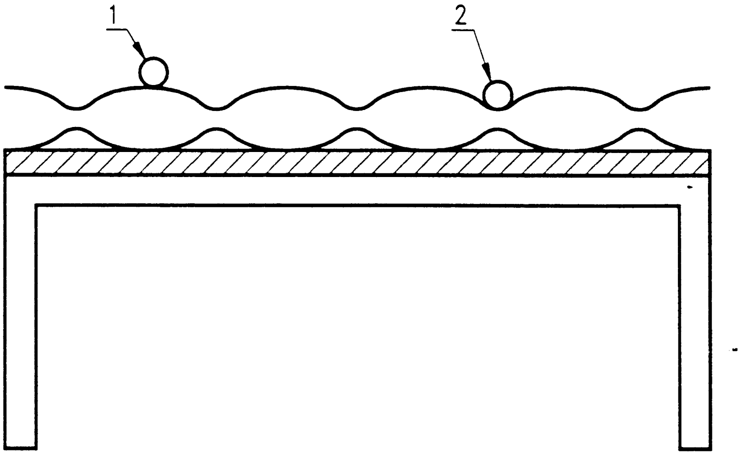
The burner tube shall be held horizontally and shall be brought into contact with the surface of the test specimen, without any pressure and without releasing it.

3.3.2 Flat bedding items

The test specimen shall be placed flat on the test rig with the testing substrate. Place the ignition source flat on top the test specimen. The position of the ignition source shall be at least 100 mm away from the edges of the specimen and at least 200 mm away from any marks left by any previous test.

3.3.3 Quilts

Place the test specimen m flat on the test rig with the testing substrate. Place the ignition source horizontally on top of the flat part of the quilt, at least 100 mm away from the edges. Carry out an additional test with the ignition source placed along the line of stitching on top of the test specimen (see figure 1). In repeat tests, place the ignition source at least 200 mm away from any mark left from any previous test.

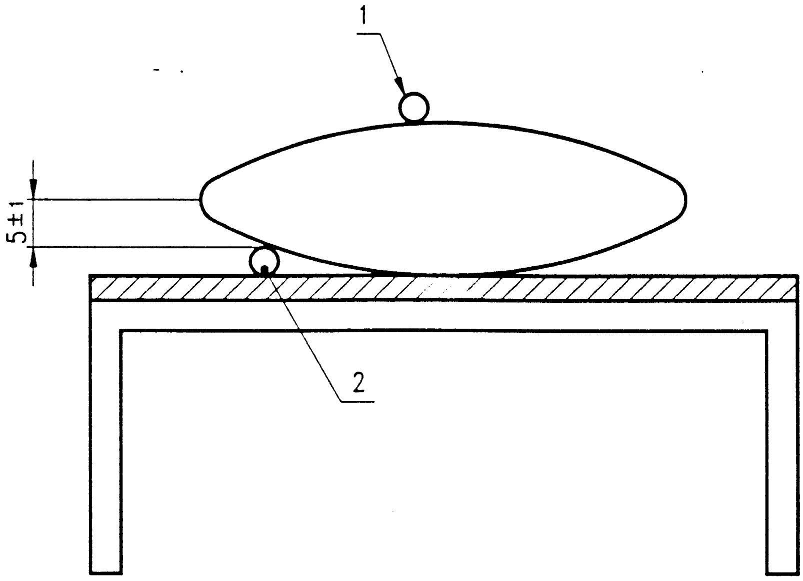


1 Ignition source placed horizontally on flat upper surface
2 Ignition source placed on line of stiching

Figure 1 : Position of ignition source

3.3.4 Pillows/Bolsters

The test specimen shall be placed flat on the test rig with the testing substrate. The ignition source shall be placed horizontally on the flat upper surface of the test specimen. An additional test shall be carried out with the ignition source placed horizontally (5 ± 1) mm below the specimen edge and with the centreline of the ignition source in the same plane as the test specimen edge (see figure 2).



1 Ignition source placed horizontally on flat upper surface
2 Ignition source placed in the same plan as pillow edge

Figure 2 : Position of ignition source

3.3.5 Duvets

The test specimen shall be tested like a pillow. For the test with the ignition source below the test specimen, the test specimen edge shall be an original one.

4 Testing of complete composites or of combinations of bedding items

4.1 Applicability

In cases where more than one or all bedding items are known, they shall be tested together because of possible interactions of the ignitability of the individual items. The relative positions of the individual items to each other during testing shall represent as closely as possible the actual set-up of the composite.

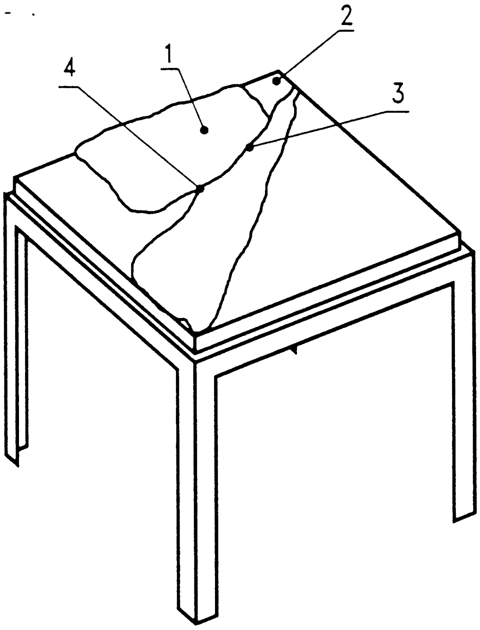
4.2 Set-up of testing composite arrangement

4.2.1 Dimensions of component test specimens making up the testing composite arrangement

Test specimens shall be cut from the components in the same way and to the same size as when testing them individually. Pillows and duvets shall be reduced to a size of (225x225) mm.

4.2.2 Positions of component test specimens and of ignition source

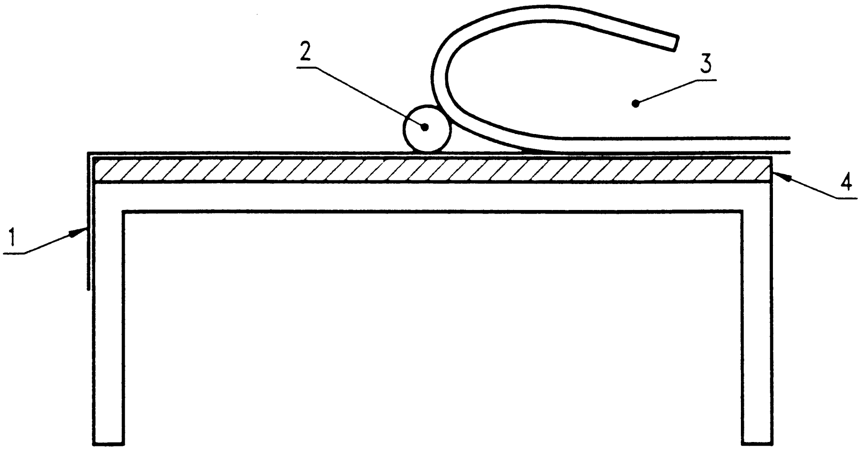
When a pillow (or bolster) and bed covers (blanket, quilt, duvet) are placed over the bottom sheet, incontinence sheet (if applicable) and mattress cover, the ignition source shall be placed centrally at the junction of pillow, bottom sheet and bed covers. The bed covers shall be folded back at an angle of approximately 30° (see figure 3). The burner tube shall be held horizontally and shall be brought into contact with the surface of the test specimens at the position shown in figure 3, without any pressure and without releasing it.



1 Pillow (half-scale size)
2 Bottom sheet in position
3 Top bed covers folded back at an angle of approximately 30°
4 Ignition source placed centrally at junction between bottom sheet and folded back top bed covers

Figure 3 : Position of ignition source

When combinations of components are tested without a pillow, the ignition source shall be placed at the junction of the bottom sheet and the bed cover (see figure 4).



1 Bottom sheet
2 Ignition source placed at junction of bottom sheet and bedcover
3 Bedcovers (folded in half)
4 Testing substrate

Figure 4 : Position of ignition source

When no pillow or bed covers are used, the combination of the bottom sheet with any underlaying sheet shall be tested as in 3.3.2.

ICS 13.220.40; 97.160.00

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